# Scientific Computing Research Environments for the Mathematical Sciences (SCREMS)

**Program Solicitation** 

NSF 01-16

DIVISION OF MATHEMATICAL SCIENCES

**DEADLINE(S): January 18** 





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# **SUMMARY OF PROGRAM REQUIREMENTS**

#### **GENERAL INFORMATION**

**Program Title:** Scientific Computing Research Environments for the Mathematical Sciences (SCREMS)

Synopsis of Program: The Division of Mathematical Sciences (DMS) of the National Science Foundation plans a limited number of grants for the support of computing environments for research in the mathematical sciences. SCREMS proposals are for computing environments dedicated to research in the mathematical sciences. Proposals may request support for purchase of computing equipment, and limited support for professional systems administrators or programmer personnel for research computing needs. These grants are intended for researchers of high quality and productivity whose research requires access to suitable equipment. Awards are made to provide support for specific research projects rather than to provide general computing capacity. Proposers are encouraged to include projects involving symbolic and algebraic computations and graphical representations (visualization) in aid of the research as well as those emphasizing traditional numerical computations and simulations.

### **Cognizant Program Officer(s):**

• Dr. Alvin I. Thaler, Program Director, MPS, DMS, 1025, telephone: 703-292-4863, e-mail: <a href="mailto:thaler@nsf.gov">thaler@nsf.gov</a>.

#### **Applicable Catalog of Federal Domestic Assistance (CFDA) Number(s):**

• 47.049 --- Mathematical and Physical Sciences

#### **ELIGIBILITY INFORMATION**

- **Organization Limit:** Proposals may be submitted by U.S. educational institutions with ongoing research programs in mathematics, applied mathematics, or statistics. Proposals involving inter-institutional or inter-departmental sharing arrangements are welcome.
- PI Eligibility Limit: None
- Limit on Number of Proposals: None

# **AWARD INFORMATION**

- Anticipated Type of Award: Standard Grant
- Estimated Number of Awards: 20
- **Anticipated Funding Amount:** Approximately \$1,000,000 available for this Fiscal Year (subject to availability of funds)

#### PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

#### A. Proposal Preparation Instructions

- Full Proposal Preparation Instructions: Deviations From Standard Preparation Guidelines
  - The program announcement/solicitation contains deviations from the standard Grant Proposal Guide (GPG) proposal preparation guidelines. Please see the full program announcement/solicitation for further information.

# B. Budgetary Information

- Cost Sharing Requirements: Cost Sharing is Specialized
- **Cost Sharing Level/Amount:** Please see the full program solicitation for further information
- Indirect Cost (F&A) Limitations: 10% (applied only to personnel costs, if any). No indirect costs on equipment portion of budget.
- Other Budgetary Limitations: See the full Program Solicitation for further information.

# C. Deadline/Target Dates

- Letter of Intent Due Date(s): None
- **Preproposal Due Date(s):** None
- **Full Proposal Due Date(s):** January 18

# D. FastLane Requirements

- FastLane Submission: Full Proposal Required
- FastLane Contact(s):
  - LaVern M. Friels, Computer Specialist, Mathematical Sciences, telephone: 703-292-4854, e-mail: <a href="mailto:dmsfl@nsf.gov">dmsfl@nsf.gov</a>.

#### PROPOSAL REVIEW INFORMATION

• **Merit Review Criteria:** National Science Board approved criteria. Additional merit review considerations apply. Please see the full program announcement/solicitation for further information.

#### AWARD ADMINISTRATION INFORMATION

- **Award Conditions:** Standard NSF award conditions apply.
- **Reporting Requirements:** Standard NSF reporting requirements apply.

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#### I. INTRODUCTION

The Division of Mathematical Sciences of the National Science Foundation plans a limited number of grants for the support of computing environments for research in the mathematical sciences. This solicitation provides guidance for the preparation of eligible proposals.

Who may submit: Proposals may be submitted by U.S. educational institutions with ongoing research programs in mathematics, applied mathematics, or statistics. Proposals involving inter-institutional or inter-departmental sharing arrangements are welcome.

Purpose: SCREMS proposals are for computing environments dedicated to research in the mathematical sciences. Proposals may request support for purchase of computing equipment, and limited support for professional systems administrators or programmer personnel for research computing needs. These grants are intended for researchers of high quality and productivity whose research requires access to suitable equipment. Awards are made to provide support for specific research projects rather than to provide general computing capacity. Proposers are encouraged to include projects involving symbolic and algebraic computations and graphical representations (visualization) in aid of the research as well as those emphasizing traditional numerical computations and simulations.

Proposers and institutions may find appropriate other NSF sources of support for instrumentation, including the Major Research Instrumentation (MRI) program, most recent Program Announcement 99-34 (for updated information see <a href="http://www.nsf.gov/od/oia/programs/mri/start.htm">http://www.nsf.gov/od/oia/programs/mri/start.htm</a>).

# II. PROGRAM DESCRIPTION

Principal Investigator: Faculty member(s) who are administratively responsible for the acquisition planning, use, and maintenance of the equipment. For convenience the Department Head may be designated, but this is not required.

Character of requests: This Program is intended to provide for needs that cannot be met by other research programs of NSF's Division of Mathematical Sciences. Requests are expected to be for support that is required jointly by several (two to five) research projects or difficult to justify for one project alone. Amalgamation of small requests that could be made to disciplinary research programs is discouraged.

SCREMS proposals may request funding for equipment only, certain personnel costs only (see Section 6 below), or both equipment and personnel costs.

When appropriate and cost-effective, requests for group or departmental servers may be suitable for the SCREMS program.

It is especially important that the proposers make a strong case for the proposed computing environment as a coherent "computer system" and be able to describe thoroughly and in detail the impact of the proposed equipment on the proposed research activities. If this is intended to be the main computer system for a collection of research projects, describe the minimum computing requirements and explain, if necessary, why a more-than-minimum system might be proposed. If the proposed equipment includes a "server" and "workstations," are the workstations of power equal to or greater than the server? This would require additional, separate justification.

Budget Request Size: If equipment is requested, the total discounted cost of the equipment portion should be at least \$40,000. There is no minimum if support is requested only for professional systems administrators or programmer personnel for research computing needs. See Section 6 below.

Some awards may be as high as \$200,000, provided a case is made for substantial impact and cost-effectiveness.

# III. ELIGIBILITY INFORMATION

Proposals may be submitted by U.S. educational institutions with ongoing research programs in mathematics, applied mathematics, or statistics. Proposals involving inter-institutional or inter-departmental sharing arrangements are welcome.

#### IV. AWARD INFORMATION

The estimated number of awards is 20. Anticipated total funding amount is \$1,000,000. Estimated program budget, number of awards and average award size/duration are subject to the availability of funds.

#### V. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

#### **A. Proposal Preparation Instructions**

#### **Full Proposal Instructions:**

Proposals submitted in response to this program announcement/solicitation should be prepared and submitted in accordance with the general guidelines contained in the NSF *Grant Proposal Guide* (GPG). The complete text of the GPG is available electronically on the NSF Web Site at:

http://www.nsf.gov/cgi-bin/getpub?nsf012. Paper copies of the GPG may be obtained from the NSF Publications Clearinghouse, telephone (301) 947-2722 or by e-mail from pubs@nsf.gov.

# **Proposal Format**

Proposals should contain each of the eight parts detailed below, in the order given. Proposals should not exceed 15 pages in total length (10 or 12 point font) including any appendices, but excluding the Cover Sheet (NSF Form 1207), Table of Contents, the NSF budget form, Biographical Sketches, and statement(s) of other support. Proposals not adhering to the page limitations or to the requirements of NSF 01-02, or not received by the deadline, will be returned. The Biographical Sketches (vitae) section has its own page limit; the entire vitae section must not exceed three pages (see Section 5 below).

- 1. Completed Cover Sheet
- a. Program Solicitation: For consideration by Division of Mathematical Sciences; Solicitation number NSF01-16.
- b. Title: Scientific Computing Research Environments for the Mathematical Sciences (SCREMS)
- 2. Project Summary Proposal Section A

The proposal must contain a summary (200 words overall) briefly describing the equipment requested and the research projects for which it is to be used. Suggested format:

The Department(s) of	at the University	sity
(Universities) of	will	
purchase	equipment which will be	
dedicated to the support of research	in the mathematical sciences. The	
equipment will be used for several r	research projects, including in	
particular: (etc.).		

- 3. Table of contents Proposal Section B. NSF Standard FastLane Form 1359 (10/99). This section will be generated automatically by FastLane.
- 4. Project Description Proposal Section C

This section must consist of the following:

a) Brief description (not to exceed two pages) of minimum user requirements. Requirements for such items as operating systems, networking capability, compatibility with existing hardware, software requirements, speed, internal and external memory, resolution and color or monochrome capability, etc., should be included.

- b) Abstracts of individual research projects. For each of the proposed research projects (usually at least two, and strictly limited to five) give the project title, name(s) of participating researchers, and a short summary of the research project (100 words).
- c) Detailed explanation of each proposed research project and its relationship to the requested equipment. This portion of the proposal must not exceed 3 pages per project. For each project listed under Section IVb, above, give appropriate scientific justification and literature references, and explain how the research is dependent upon the requested equipment.

The scientific merit of the research made possible by the requested equipment, and the impact of the proposed equipment on the research activity, are the most important selection criteria.

Proposals will be judged by a panel of mathematical scientists chosen to provide a wide range of expertise across the mathematical sciences, but some subareas may not be represented by specialists. Thus, all proposals must contain descriptions of the research projects in sufficient detail so that the scientific merit of each project can be evaluated by qualified reviewers who may or may not be specialists in the proposed research areas. Particular emphasis should be given to those unique or new scientific capabilities which will ensue from the proposed acquisition.

- d) Detailed plan for maintenance and operation. Include names of individuals responsible for the equipment, and the annual budget that the institution will allocate for these purposes. This plan should be for a three year period. If personnel support is requested, please include relevant details, including qualifications and duties of individuals involved, and an explicit statement of the institution's agreement to assume personnel costs permanently, after a period not to exceed two years.
- e) Available equipment. This section should include a complete description of equipment and related supporting personnel currently available to the Department(s). List the research computing facilities that are presently available to the participating researchers, and if appropriate describe the support staff dedicated to maintenance and operation of the equipment and system. Make explicit reference to the current location, condition, and use of any equipment purchased by your institution under prior SCREMS grants. List current pending equipment requests to NSF and to other funding sources.

#### 5. Biographical Sketches - Proposal Section E

This section will consist of biographical data and will include only the academic essentials for the participating researchers listed under Section IVb above. This may include, for the participating researchers, a list of up to five publications most closely related to the proposed equipment acquisition, and up to five other significant recent publications. This material should appear in the Biographical Sketches section and will not be counted in the page limitation requirement. The entire Biographical Sketches section is limited to no more than 3 pages.

# 6. Budget, Institutional Commitments and Cost Sharing - Proposal Section F

Show total costs and all sources of support. The budget should make reference to a representative manufacturer and model numbers, with itemized and total costs. If the request includes funding for equipment, the total discounted cost of equipment should be at least \$40,000. If support is requested only for professional systems administrators or programmer personnel for research computing needs, there is no minimum.

The proposal should describe the institution's provisions for space, installation, maintenance and operation of the requested equipment. NSF will not provide funds for these items.

Institutions submitting proposals must cost-share 50% of the cost of the proposed equipment -fifty per cent of the net (after discount) cost. Eligible cost-sharing is allowed only on the cost of equipment and not the costs associated with existing or irrelevant equipment, site preparation, maintenance, or installation costs.

SCREMS proposals may include requests for partial support (salary and fringe benefits), for up to two years, for professional systems administrators or programmer personnel for research computing needs. (Graduate students performing these functions will not be supported under this program). In each request for such, provision must be made by the University for cost-sharing half of the personnel costs. Proposals must also include a statement that the grantee will assume the full personnel costs after its NSF funding ends.

No indirect costs will be permitted on equipment portions of grants. The indirect cost rate applied to personnel will be limited to 10%, with the difference between the actual indirect cost rate and 10% allocated to the substantial cost-sharing (beyond the 50% personnel match referenced in the previous paragraph) required on SCREMS awards.

All cost sharing must be shown on Line M of the Budget Form.

7. References Cited.

SCREMS proposals need not have a separate Proposal Section D - References Cited - as called for in the GPG. References may be cited within Proposal Section C.

8. Current and pending project support - Proposal Section G

This includes all anticipated requests for such, from whatever source (e.g., Federal, State or local government agencies, private foundations, industrial or other commercial organizations). See II.C.7 of the GPG (NSF 01-2).

Proposers are reminded to identify the program solicitation number (NSF 01-16) in the program announcement/solicitation block on the proposal Cover Sheet (NSF Form 1207). Compliance with this requirement is critical to determining the relevant proposal processing guidelines. Failure to submit this information may delay processing.

#### **B.** Budgetary Information

COST SHARING: 50% of the net (after discount) cost of equipment; 50% of personnel salary and fringe benefits, if requested. See details in the body of the solicitation. The indirect cost rate applied to personnel costs (salary and fringe benefits) will be limited to 10%.

The proposed cost sharing must be shown on Line M on the proposal budget. Documentation of the availability of cost sharing must be included in the proposal. Only items which would be allowable under the applicable cost principles, if charged to the project, may be included as the awardee's contribution to cost sharing. Contributions may be made from any non-Federal source, including non-Federal grants or contracts, and may be cash or in-kind (see OMB Circular A-110, Section 23). It should be noted that contributions counted as cost-sharing toward projects of another Federal agency may not be counted towards meeting the specific cost-sharing requirements of the NSF award. All cost-sharing amounts are subject to audit. Failure to provide the level of cost-sharing reflected in the approved award budget may result in termination of the NSF award, disallowance of award costs and/or refund of award funds to NSF.

*Indirect Cost (F&A) Limitations:* 10% (applied only to personnel costs, if any). No indirect costs on equipment portion of budget.

Other Budgetary Limitations: See the full Program Solicitation for further information.

#### C. Deadline/Target Dates

Proposals submitted in response to this announcement/solicitation must be submitted by 5:00 PM, local time on the following date(s):

January 18

#### **D.** FastLane Requirements

Proposers are required to prepare and submit all proposals for this Program Solicitation through the FastLane system. Detailed instructions for proposal preparation and submission via FastLane are available at: <a href="http://www.fastlane.nsf.gov/a1/newstan.htm">http://www.fastlane.nsf.gov/a1/newstan.htm</a>. For FastLane user support, call 1-800-673-6188.

Submission of Signed Cover Sheets. The signed copy of the proposal Cover Sheet (NSF Form 1207) must be postmarked (or contain a legible proof of mailing date assigned by the carrier) within five working days following proposal submission and be forwarded to the following address:

National Science Foundation DIS – FastLane Cover Sheet 4201 Wilson Blvd. Arlington, VA 22230

#### VI. PROPOSAL REVIEW INFORMATION

### **A. NSF Proposal Review Process**

Reviews of proposals submitted to NSF are solicited from peers with expertise in the substantive area of the proposed research or education project. These reviewers are selected by Program Officers charged with the oversight of the review process. NSF invites the proposer to suggest at the time of submission, the names of appropriate or inappropriate reviewers. Care is taken to ensure that reviewers have no conflicts with the proposer. Special efforts are made to recruit reviewers from non-academic institutions, minority-serving institutions, or adjacent disciplines to that principally addressed in the proposal.

Proposals will be reviewed against the following general review criteria established by the National Science Board. Following each criterion are potential considerations that the reviewer may employ in the evaluation. These are suggestions and not all will apply to any given proposal. Each reviewer will be asked to address only those that are relevant to the proposal and for which he/she is qualified to make judgements.

#### What is the intellectual merit of the proposed activity?

How important is the proposed activity to advancing knowledge and understanding within its own field or across different fields? How well qualified is the proposer (individual or team) to conduct the project? (If appropriate, the reviewer will comment on the quality of the prior work.) To what extent does the proposed activity suggest and explore creative and original concepts? How well conceived and organized is the proposed activity? Is there sufficient access to resources?

#### What are the broader impacts of the proposed activity?

How well does the activity advance discovery and understanding while promoting teaching,

training, and learning? How well does the proposed activity broaden the participation of underrepresented groups (e.g., gender, ethnicity, disability, geographic, etc.)? To what extent will it enhance the infrastructure for research and education, such as facilities, instrumentation, networks, and partnerships? Will the results be disseminated broadly to enhance scientific and technological understanding? What may be the benefits of the proposed activity to society?

Principal Investigators should address the following elements in their proposal to provide reviewers with the information necessary to respond fully to both of the above-described NSF merit review criteria. NSF staff will give these elements careful consideration in making funding decisions.

# Integration of Research and Education

One of the principal strategies in support of NSF's goals is to foster integration of research and education through the programs, projects, and activities it supports at academic and research institutions. These institutions provide abundant opportunities where individuals may concurrently assume responsibilities as researchers, educators, and students and where all can engage in joint efforts that infuse education with the excitement of discovery and enrich research through the diversity of learning perspectives.

#### Integrating Diversity into NSF Programs, Projects, and Activities

Broadening opportunities and enabling the participation of all citizens – women and men, underrepresented minorities, and persons with disabilities – is essential to the health and vitality of science and engineering. NSF is committed to this principle of diversity and deems it central to the programs, projects, and activities it considers and supports.

#### **Additional Review Criteria**

In addition to the above, proposals will also be evaluated on the following:

- Scientific merit of the research made possible by the requested equipment,
- Impact of the proposed equipment on the research activity,
- Qualifications and productivity of researchers,
- Justification of need for proposed equipment,
- Choice and appropriateness of equipment,
- Appropriateness of personnel support,
- Plan for maintenance and operation, and
- Impact of the proposed equipment and environment on the department and institution.

A summary rating and accompanying narrative will be completed and signed by each reviewer. In all cases, reviews are treated as confidential documents. Verbatim copies of reviews, excluding the names of the reviewers, are sent to the Principal Investigator/Project Director by the Program Director. In addition, the proposer will receive an explanation of the decision to award or decline funding.

#### B. Review Protocol and Associated Customer Service Standard

All proposals are carefully reviewed by at least three other persons outside NSF who are experts in the particular field represented by the proposal. Proposals submitted in response to this announcement/solicitation will be reviewed by Panel Review.

Reviewers will be asked to formulate a recommendation to either support or decline each proposal. The Program Officer assigned to manage the proposal's review will consider the advice of reviewers and will formulate a recommendation.

NSF will be able to tell applicants whether their proposals have been declined or recommended for funding within six months for 95 percent of proposals. The time interval begins on the proposal deadline or target date or from the date of receipt, if deadlines or target dates are not used by the program. The interval ends when the Division Director accepts the Program Officer's recommendation.

In all cases, after programmatic approval has been obtained, the proposals recommended for funding will be forwarded to the Division of Grants and Agreements for review of business, financial, and policy implications and the processing and issuance of a grant or other agreement. Proposers are cautioned that only a Grants and Agreements Officer may make commitments, obligations or awards on behalf of NSF or authorize the expenditure of funds. No commitment on the part of NSF should be inferred from technical or budgetary discussions with a NSF Program Officer. A Principal Investigator or organization that makes financial or personnel commitments in the absence of a grant or cooperative agreement signed by the NSF Grants and Agreements Officer does so at its own risk.

#### VII. AWARD ADMINISTRATION INFORMATION

#### A. Notification of the Award

Notification of the award is made to *the submitting organization* by a Grants Officer in the Division of Grants and Agreements. Organizations whose proposals are declined will be advised as promptly as possible by the cognizant NSF Program Division administering the program. Verbatim copies of reviews, not including the identity of the reviewer, will be provided automatically to the Principal Investigator. (See section VI.A. for additional information on the review process.)

#### **B.** Award Conditions

An NSF award consists of: (1) the award letter, which includes any special provisions applicable to the award and any numbered amendments thereto; (2) the budget, which indicates the amounts, by categories of expense, on which NSF has based its support (or otherwise communicates any specific approvals or disapprovals of proposed expenditures); (3) the proposal

referenced in the award letter; (4) the applicable award conditions, such as Grant General Conditions (NSF-GC-1)\* or Federal Demonstration Partnership (FDP) Terms and Conditions \* and (5) any announcement or other NSF issuance that may be incorporated by reference in the award letter. Cooperative agreement awards also are administered in accordance with NSF Cooperative Agreement Terms and Conditions (CA-1). Electronic mail notification is the preferred way to transmit NSF awards to organizations that have electronic mail capabilities and have requested such notification from the Division of Grants and Agreements.

\*These documents may be accessed electronically on NSF's Web site at <a href="http://www.nsf.gov/home/grants/grants\_gac.htm">http://www.nsf.gov/home/grants/grants\_gac.htm</a>. Paper copies may be obtained from the NSF Publications Clearinghouse, telephone (301) 947-2722 or by e-mail from pubs@nsf.gov.

More comprehensive information on NSF Award Conditions is contained in the NSF *Grant Policy Manual* (GPM) Chapter II, available electronically on the NSF Web site at <a href="http://www.nsf.gov/cgi-bin/getpub?gpm">http://www.nsf.gov/cgi-bin/getpub?gpm</a>. The GPM is also for sale through the Superintendent of Documents, Government Printing Office (GPO), Washington, DC 20402. The telephone number at GPO for subscription information is (202) 512-1800. The GPM may be ordered through the GPO Web site at <a href="http://www.gpo.gov">http://www.gpo.gov</a>.

#### **C. Reporting Requirements**

For all multi-year grants (including both standard and continuing grants), the PI must submit an annual project report to the cognizant Program Officer at least 90 days before the end of the current budget period.

Within 90 days after the expiration of an award, the PI also is required to submit a final project report. Approximately 30 days before expiration, NSF will send a notice to remind the PI of the requirement to file the final project report. Failure to provide final technical reports delays NSF review and processing of pending proposals for that PI. PIs should examine the formats of the required reports in advance to assure availability of required data.

NSF has implemented an electronic project reporting system, available through FastLane. This system permits electronic submission and updating of project reports, including information on project participants (individual and organizational), activities and findings, publications, and other specific products and contributions. PIs will not be required to re-enter information previously provided, either with a proposal or in earlier updates using the electronic system.

# VIII. CONTACTS FOR ADDITIONAL INFORMATION

General inquiries regarding Scientific Computing Research Environments for the Mathematical Sciences should be made to:

• Dr. Alvin I. Thaler, Program Director, MPS, DMS, 1025, telephone: 703-292-4863, e-mail: thaler@nsf.gov.

For questions related to the use of FastLane, contact:

• LaVern M. Friels, Computer Specialist, Mathematical Sciences, telephone: 703-292-4854, e-mail: dmsfl@nsf.gov.

#### IX. OTHER PROGRAMS OF INTEREST

The NSF *Guide to Programs* is a compilation of funding for research and education in science, mathematics, and engineering. The NSF *Guide to Programs* is available electronically at <a href="http://www.nsf.gov/cgi-bin/getpub?gp">http://www.nsf.gov/cgi-bin/getpub?gp</a>. General descriptions of NSF programs, research areas, and eligibility information for proposal submission are provided in each chapter.

Many NSF programs offer announcements or solicitations concerning specific proposal requirements. To obtain additional information about these requirements, contact the appropriate NSF program offices. Any changes in NSF's fiscal year programs occurring after press time for the *Guide to Programs* will be announced in the NSF <u>E-Bulletin</u>, which is updated daily on the NSF web site at <a href="http://www.nsf.gov/home/ebulletin">http://www.nsf.gov/home/ebulletin</a>, and in individual program announcements/solicitations. Subscribers can also sign up for NSF's <a href="Custom News Service">Custom News Service</a> (<a href="http://www.nsf.gov/home/cns/start.htm">http://www.nsf.gov/home/cns/start.htm</a>) to be notified of new funding opportunities that become available.

Proposers and institutions may find appropriate other NSF sources of support for instrumentation, including the Major Research Instrumentation (MRI) program, most recent Program Announcement 99-34 (for updated information see <a href="http://www.nsf.gov/od/oia/programs/mri/start.htm">http://www.nsf.gov/od/oia/programs/mri/start.htm</a>).

#### ABOUT THE NATIONAL SCIENCE FOUNDATION

The National Science Foundation (NSF) funds research and education in most fields of science and engineering. Awardees are wholly responsible for conducting their project activities and preparing the results for publication. Thus, the Foundation does not assume responsibility for such findings or their interpretation.

NSF welcomes proposals from all qualified scientists, engineers and educators. The Foundation strongly encourages women, minorities and persons with disabilities to compete fully in its programs. In accordance with Federal statutes, regulations and NSF policies, no person on grounds of race, color, age, sex, national origin or disability shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving financial assistance from NSF (unless otherwise specified in the eligibility requirements for a particular program).

Facilitation Awards for Scientists and Engineers with Disabilities (FASED) provide funding for special assistance or equipment to enable persons with disabilities (investigators and other staff, including student research assistants) to work on NSF-supported projects. See the program announcement/solicitation for further information.

The National Science Foundation has Telephonic Device for the Deaf (TDD) and Federal Information Relay Service (FIRS) capabilities that enable individuals with hearing impairments to communicate with the Foundation about NSF programs, employment or general information. TDD may be accessed at (703) 292-5090, FIRS at 1-800-877-8339.

The National Science Foundation is committed to making all of the information we publish easy to understand. If you have a suggestion about how to improve the clarity of this document or other NSF-published materials, please contact us at <a href="mailto:plainlanguage@nsf.gov">plainlanguage@nsf.gov</a>.

# PRIVACY ACT AND PUBLIC BURDEN STATEMENTS

The information requested on proposal forms and project reports is solicited under the authority of the National Science Foundation Act of 1950, as amended. The information on proposal forms will be used in connection with the selection of qualified proposals; project reports submitted by awardees will be used for program evaluation and reporting within the Executive Branch and to Congress. The information requested may be disclosed to qualified reviewers and staff assistants as part of the proposal review process; to applicant institutions/grantees to provide or obtain data regarding the proposal review process, award decisions, or the administration of awards; to government contractors, experts, volunteers and researchers and educators as necessary to complete assigned work; to other government agencies needing information as part of the review process or in order to coordinate programs; and to another Federal agency, court or party in a court or Federal administrative proceeding if the government is a party. Information about Principal Investigators may be added to the Reviewer file and used to select potential candidates to serve as peer reviewers or advisory committee members. See Systems of Records, NSF-50, "Principal Investigator/Proposal File and Associated Records," 63 Federal Register 267 (January 5, 1998), and NSF-51, "Reviewer/Proposal File and Associated Records," 63 Federal Register 268 (January 5, 1998). Submission of the information is voluntary. Failure to provide full and complete information, however, may reduce the possibility of receiving an award.

Pursuant to 5 CFR 1320.5(b), an agency may not conduct or sponsor, and a person is not required to respond to an information collection unless it displays a valid OMB control number. The OMB control number for this collection is 3145-0058. Public reporting burden for this collection of information is estimated to average 120 hours per response, including the time for reviewing instructions. Send comments regarding this burden estimate and any other aspect of this collection of information, including suggestions for reducing this burden, to: Suzanne Plimpton, Reports Clearance Officer, Information Dissemination Branch, Division of Administrative Services, National Science Foundation, Arlington, VA 22230, or to Office of Information and Regulatory Affairs of OMB, Attention: Desk Officer for National Science Foundation (3145-0058), 725 17th Street, N.W. Room 10235, Washington, D.C. 20503.

OMB control number: 3145-0058.